ABSTRACT

MEMORY CONTROLLER

A memory controller, such as a SDRAM controller, controls
the way in which data is retrieved, in order to make more
efficient use of the bandwidth of the memory data bus.
More specifically, when a memory access request requires
multiple data bursts on the memory bus, the SDRAM
controller stores the data from the multiple data bursts in
respective buffers. Data is then retrieved from the
buffers such that data is read from a part of the first
buffer, then from the other buffers, and finally from the
remaining part of the first buffer. Storing the required
data in the remaining part of the first buffer avoids the
need to occupy the memory bus with a new data burst.